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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/648,918

08/27/2003

Katsuhiko Miya

P/1250-258

5086

2352 7590 05/15/2008  
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EXAMINER

MACARTHUR, SYLVIA

ART UNIT

PAPER NUMBER

1792

MAIL DATE

DELIVERY MODE

05/15/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/648,918	<b>Applicant(s)</b> MIYA ET AL.	
	<b>Examiner</b> Sylvia R. MacArthur	<b>Art Unit</b> 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 February 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,3-10,19,21 and 22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-10,19,21 and 22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/29/2008 has been entered.

***Response to Arguments***

2. Applicant's arguments with respect to claims 1, 3-10, 19, 21, and 22 have been considered but are moot in view of the new ground(s) of rejection. Applicant has argued that the prior art of Taniyama et al (US 6,246,479) fails to teach or fairly suggest the present invention as it lacks an atmosphere blocking plate that is substantially the same in planar shape and size as the substrate holding/rotating element. Furthermore, it is noted that the prior art of Taniyama et al fails to teach an atmosphere blocking plate is that rotatably driven.

3. Upon further search and consideration of the claimed subject matter and the amendment of claims 1 and 19 wherein the plate is rotatably driven. It is noted that new claim 22 does not include the limitation that the plate is rotatably driven. The prior art of Miya et al (US 2005/0276921) and Miya (US 2006/0021636) teach and or fairly suggest these elements and will be further discussed below.

***Double Patenting***

4. Claims 1,3-10, 19, 21, and 22 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-7 of

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copending Application No. 11/130,585, using Miya (US 2005/0276921) in view of Miya (JP 11-274135).

5. Regarding claims 1 and 22: Although the conflicting claims are not identical, they are not patentably distinct from each other because the copending application claims a rotary member(substrate holding/rotating element) that is rotatably driven by the rotating element, a platy member (atmosphere blocking plate) has a gas ejection outlet, and a top side processing liquid supplier. The claimed apparatus of the co-pending application fails to teach where the gas ejection outlet (a gas discharge port) is located and further fails to teach an outer gas port.

6. The prior art of Miya (JP 411274135A) teaches an atmosphere shielding member 2 that is rotatably driven and provided with two gas discharge ports 43,44 (Fig.6 wherein inner port 43 is eccentric (or off center) as related to the center 3 of the plate and an outer gas port 44 enclosed the inner port 43. The motivation to combine the teachings of the co-pending application and the prior art by Miya is that the combined teachings allow for the introduction of several fluids that can mix at the point of use (the surface of the substrate). According to the English Abstract of Miya the apparatus further allows for a reduction in drying time and the generation of water mark. Thus, it would have been obvious for one of ordinary skill in the art at the time of the claimed invention to combine the teachings of the co-pending application and prior art of Miya.

7. Regarding claims 4 and 8: This is a matter of an intended use as the two ports 43,44 are independently operable and thus capable of allowing for same and/or different start times.

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8. Regarding claims 5 and 9: See Fig. 6 Miya where the outer port size is larger than the inner port size and thus meets the claim.

9. Regarding claims 6, 10, and 19: Support element of the co-pending application is interpreted as the support cylinder.

10. Regarding claims 7 and 20: See Fig. 6 of the Miya.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

11. Claims 1, 3-5, 7-9, and 21, and 22 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-8 of copending Application No. 11/154,363, using Miya (US 2006/0021636).

12. Regarding claims 1 and 22: Although the conflicting claims are not identical, they are not patentably distinct from each other because the copending application claims substrate supporting unit (substrate holding/rotating element) that is retractably driven by the rotating element via a rotary driving unit, a blocking element (atmosphere blocking plate) has a gas ejection unit, and a processing liquid supplier, see claims 1 and 2. The claimed apparatus of the co-pending application fails to teach where the gas ejection unit (a gas discharge port) is located and further fails to teach an outer gas port. Note claim 7 does teach plurality of holes in the blocking member.

13. The prior art of Miya (JP 411274135A) teaches an atmosphere shielding member 2 that is rotatably driven and provided with two gas discharge ports 43, 44 (Fig. 6 wherein inner port 43 is eccentric (or off center) as related to the center 3 of the plate and an outer gas port 44 enclosed the inner port 43. The motivation to combine the teachings of the co-pending application and the prior art by Miya is that the combined teachings

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allow for the introduction of several fluids that can mix at the point of use (the surface of the substrate). According to the English Abstract of Miya the apparatus further allows for a reduction in drying time and the generation of water mark. Thus, it would have been obvious for one of ordinary skill in the art at the time of the claimed invention to combine the teachings of the co-pending application and prior art of Miya.

14. Regarding claims 4 and 8: This is a matter of an intended use as the two ports 43,44 are independently operable and thus capable of allowing for same and/or different start times.

15. Regarding claims 5 and 9: See Fig. 6 Miya where the outer port size is larger than the inner port size and thus meets the claim.

16. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sylvia R. MacArthur whose telephone number is 571-272-1438. The examiner can normally be reached on M-Th during the hours of 8 a.m. and 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on 571-272-1435. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

May 12, 2008

/Sylvia R MacArthur/  
Primary Examiner, Art Unit 1792